

UNIVERSITY OF QUEENSLAND

Computer Centre

NEWSLETTER

authorization: Director of the Computer Centre

1 SPRINT-10 TO REPLACE CDRSTK FOR READING BATCH CARDS

CDRSTK is the first of the MPB (Batch) programs. It reads cards and processes \$ control cards to produce disk files including a log of the job's activity and a control file for BATCON, the second MPB program.

CDRSTK has been superseded by SPRINT-10, a completely rewritten replacement. The same functions are performed with a few new features added and some redundant switches removed. After incorporating some local changes, such as the COST switch on the \$JOB card and extensive testing, the Centre plans to use SPRINT-10 operationally from the 14TH AUGUST.

SPRINT-10 will be fully documented in future editions of DECsystem-10 Users Handbook, but since the changes are few the following list of differences will supplement the present edition.

1.1 New Control Cards

\$BLISS	same switches as other \$ languages
\$EXECUTE	an alternative to \$DATA if there is no data. /MAP and /OLD are the only switches.
\$INCLUDE	to include existing relocatable files in the next EXECUTE command generated by \$EXECUTE or \$DATA. /SEARCH is the only allowable switch. example: \$INCLUDE PLOT:CALCMP/SEARCH
\$EOJ	an alternative to the end-of-file card to end a job.

1.2 New Switches on \$JOB

/HOLLERITH:026	interpret the cards in 026 mode unless another mode is explicitly given for a deck
/HOLLERITH:ASC	the default
/AFTER:dd-mmm-yy hh:mm	job cannot be run until
/AFTER:+hh:mm	after this time
/DEADLINE:dd-mmm-yy hh:mm	job should be completed
/DEADLINE:+hh:mm	by this time
/ERROR:n	the number of Hollerith errors to tolerate before terminating the job. Bad columns are read as "\". The default is 100. (The number of binary checksum errors and illegal binary cards may also be specified).

1.3 Other New Switches

/MAP	on \$DATA or \$EXECUTE to print a load map
/PRINT	on \$DECK to queue the file for printing

1.4 CDRSTK Switches Not Valid for SPRINT-10

Note that the presence of an unrecognised switch is a non-fatal error for SPRINT.

/D029	not available at this installation
/LIST	on \$ language cards, redundant since a list is provided by default
/PROTECT	a PROTECT command achieves the same result
/SUPPRESS:ON	the CDRSTK default, replaced by /SUPPRESS
/SUPPRESS:OFF	replaced by /NOSUPPRESS, the SPRINT default
/SEQUENCE	on \$COBOL, redundant since it is the default
/RESTART:0	on \$JOB, the CDRSTK default, replaced by /NORESTART
/RESTART:1	the SPRINT default is "restartable", /RESTART

1.5 Other Features of SPRINT

- (a) To emphasize that "\$control cards" are processed before ".commands", a fact often not appreciated by users, the \$ cards are written at the beginning of the log file with the time of processing and a note of the resultant action.
- (b) The difficulty of punching square brackets has been recognised and round or even angle brackets may be used instead, i.e. [pj,pg] or (pj,pg) or <pj,pg>.
- (c) Unrecognised or illegal switches on control cards are not fatal errors. The switch is ignored.

1.6 Warning

Because the control card scanning routines have been rewritten, illegal syntax which was not detected by CDRSTK may not be tolerated. Some examples:

\$COBOL PROG1.CBL /(L) incorrect

\$COBOL PROG1.CBL (L) correct

The syntax is "\$COBOL dev:filename.ext (processor switches) /s1 /s2.../sn"

processor switches are enclosed in parentheses and the slash cannot appear in connection with these switches.

2 DSKS - THE SPOOLING STRUCTURE

Experience with the new disk organization since it was installed two weeks ago has lead us to the conclusion that DSKS, as presently set up, is placing an unwarrantedly large demand on disk I/O.

At present, a UFD is created on DSKS by LOGIN for all users whether or not they are actually going to use this structure. The existence of a UFD on a structure causes the monitor to LOOKUP all files to be created on device DSK: on all structures in a users search list in order to guarantee that a file is always superseded on its original structure. This represents a substantial increase in monitor disk I/O.

Therefore, from Wednesday, the 14TH AUGUST 1974, DSKS will not be automatically mounted for all users by LOGIN. Users who wish to use DSKS must issue a .MOUNT DSKS: command and a UFD will be created by the MOUNT cusp.

3 STUDENT GROUP ACCOUNTING

New versions of the accounting programs are operational which affect subaccounting. Details of any miscellaneous charges will now come through to the accounting files on your areas. The format and name of this file has been changed. The random access file LEADER.ACT has given way to an ASCII file called DETAIL.ACT. This can be read by Cobol or Fortran, edited or sorted with the Sort program quite easily.

The format is as follows:

Field	Chars	Format
CHARGNO	5	NUMERIC
PROJ	6	NUMERIC
PROG	6	NUMERIC
EXNAM	6	ALPHANUMERIC
TTY	5	TTXXX FOR TERMINAL PTXXX FOR BATCH
DATE	4	NUMERIC DDMM
TIME	4	NUMERIC HHMM
AMOUNTS	7 FIELDS OF 5 NUMERIC CHARS EACH IN INTEGER CENTS	CPU DSKIO NONDIO OTHER (computing charges) AUXL (data prep) MISC (manuals etc - non computing) CRED (this field unsigned)
CONNECT	5	CONNECT TIME FOR TERMINALS IN INTEGER MINS

example:

00095000115000117XRE TT02631071148001190003800065 00023

The Centre will be providing an analysis program shortly for those requiring one.

3.1 Detailed Accounting

Detailed accounting for those users using CLTCHG will be provided exactly as above. CLTCHG will be discontinued.

The Centre hopes that problems occurring with lost LEADER.ACT files will not happen under the new system as dump entries will be written for any ppn's containing DETAIL.ACT files.

If any users have any queries about the new system, could they contact Sarah Barry, extension 6288.

4 PLOTTER ROUTINES

This is an advance warning of changes to be announced soon.

When the CALCOMP-936 plotter is operational, new plotter software including a new spooler will be released to handle the new format of plot files.

To minimise inconvenience to present users, the spooler will also process files produced using the present CALCOMP routines, i.e. from programs loaded with PLOT:CALCMP. However, the older routines in PLOT:DEC will cause the spooler to abort the plot with a "?PLOTTER OUT OF BOUNDS" message. The current version of GLOS also produces files which cannot be plotted directly.

Users are, therefore, urged to change to the CALCOMP routines if possible. Otherwise, the plot files need to be converted to a plottable form using the program WINDOW which will be released before the new spooler is used.

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